

Attorney's Docket No.: 14170-038004 / 25-31-0101



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Hugh R. Sharkey et al.

Art Unit: 3742

Serial No.: 10/712,063

Examiner: Unknown

Filed

: November 14, 2003

Title

: METHOD FOR TREATING INTERVERTEBRAL DISCS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Copies of the references listed on the attached form PTO-1449 are enclosed. The references relate to the litigation disclosed in an IDS filed March 31, 2004. If the Examiner would like any additional documents relating to the litigation, he is encouraged to contact the undersigned.

This statement is being filed within three months of the filing date of the application or before the receipt of a first Office Action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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U.S. Department of Commerce Patent and Trademark Office Attomey's Docket No. 14170-038004

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mation Disclosure Statement by Applicant (Use several sheets if necessary)

Hugh R. Sharkey et al.

Filing Date

Applicant

Group Art Unit

November 14, 2003

3742

			U.S. Pate	nt Documents			
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
-	AA	Re. 33,258	07/10/1990	Onik et al.			
	AB	4,863,430	09/05/1989	Klyce et al.			
	AC	5,084,043	01/28/1992	Hertzmann et al.			
	AD	5,195,541	03/23/1993	Obenchain			
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	AH	5,976,105	11/02/1999	Marcove et al.			
	U.S. Patent Documents						
Examiner	Desig	Document	Publication				Filing Date
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	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner	Desig.	Document	Publication	Country or			Trans	lation
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	AI	2 012 388	05/15/1994	Russia			Yes	
	AJ							

	Other D	ocuments (include Author, Title, Date, and Place of Publication)
Examiner	Desig.	
Initial	ID	Document
	AK	Surgical Dynamics, "Discography System For Contemporary Spine Surgery," copyright 1991 (2 pages).
	AL	Surgical Dynamics, "Nucleotome System Automated Percutaneous Lumbar Discectomy" (3 pages).
	AM	Surgical Dynamics, "Nucleotome Flex II For Automated Percutaneous Lumbar Discectomy," copyright 1992 (2 pages).
	AN	Surgical Dynamics, "Surgical Technique Nucleotome Flex II for Automated Percutaneous Lumbar Discectomy," copyright 1992 (21 pages).
	AO	Surgical Dynamics, "Nucleotome Micro I For Automated Open Lumbar Discectomy," copyright 1992 (2 pages).
	AP	Surgical Dynamics, "Surgical Technique Nucleotome Micro I for Automated Open Lumbar Discectomy," copyright 1992 (4 pages).
	AQ	Bernhardt, et al., "Magnetic Resonance Imaging Analysis of Percutaneous Discectomy: A Preliminary Report," Spine, 18(2):211-217 (Feb 1993)
	BA	Capanna, A. et al., "Lumbar Discectomy-Percentage of disc removal and detection of anterior annulus performation," Spine, 6(6): 610-614 (Nov/Dec 1981)

Examiner	Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Form PTO-1449	U.S. Department of Commerce Patent and Trademark Office	Attomey's Docket No. 14170-038004	Application No. 10/712,063	
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	,	ocuments (include Author, Title, Date, and Place of Publication)
Examiner	Desig. ID	Document
Initial	טו	Castro, et al., "Restriction of Indication for Automated Percutaneous Lumbar Discectomy Based on
	BB	Computed Tomographic Discography," Spine, 17(10):1239-1243 (Oct 1992)
	BC	Cooney, "Percutaneous Lumbar Discectomy," Clinics in Sports Medicine, 12(3):557-568 (July
		1993)
	BD	Davis, G.W.et al., "Automated Percutaneous Discetomy," Spine, 16(3):359-363, (March 1991)
	BE	Day, P.L., "Lateral Approach For Lumbar Diskogram And Chemonucleloysis," Clinical Orthopaedics and Related Research, No. 67 (Nov/Dec 1969)
	BF	Garvin, P., et al., "Chymopapain: A Pharmacologic And Toxicologic Evaluation In Experimental Animals," Meeting of the Chicago Orthopedic Society, pp. 204-223 (May 10, 1963)
	BG	Gunzburg, et al., "An Experimental Study Comparing Percutaneous Discectomy with Chemonucleolysis," Spine 18(2):218-226 (Feb. 1993)
	вн	Jacobson, "Lumbar Percutaneous Diskectomy," <u>Bulletin of the Hospital for Joint Diseases</u> Orthopaedic Institute, Vol. 48, no. 1 (1988)
	BI	Kahanovitz, et al., "A Multicenter Analysis of Percutaneous Discectomy," Spine, 15(7):713-715 (July 1990)
	BJ	Kambin, et al., "Arthroscopic Microdiscetomy versus Nucleotomy Techniques," Clinics in Sports Medicine, 12(3):587-598 (July 1993)
	BK	Kambin, et al., "Development of Degenerative Spondylosis of the Lumbar Spine After Partial Discectomy," Spine, 20(5):599-607 (March 1, 1995)
	BL	Kambin, et al., "History and Current Status of Percutaneous Arthroscopic Disc Surgery," Spine, 21(245):575-615 (Dec. 15, 1996)
	ВМ	Kambin, et al., "Percutaneous Posterolateral Discectomy: Anatomy and Mechanism," Clinical Orthopaedics and Related Research, No. 223 (Oct. 1987)
	BN	Kaufman, H. et al., "Mechanical Aspiration Of Hematomas In An In Vitro Model," <u>Neurosurgery</u> , 25(3): 347-350 (Sept. 1989)
	ВО	Kornberg, "Automated Percutaneous Lumbar Discectomy as Treatment for Lumbar Disc Disruption," Spine, 18(3):395-397 (March 1993)
	BP	Koutrouvelis, et al., "Stereotactic Percutaneous Lumbar Discectomy," Neurosurgery, 32(4):582-58 (April 1993)
	BQ	Liebler, "Percutaneous Laser Disc Decompression: Clinical Experience with the Nd:YAG and KT Lasers," Spine: State of the Art Reviews, 7(1):55-65 (Jan. 1993)
	BR	Lorenz, M. et al., "Chemonucleolysis for Herniated Nucleous Pulposus In Adolescents," <u>Journal of Bone and Joint Surgery</u> , 67-A(9): 1402-1404 (Dec. 1985)
	BS	Maroon, J. et al., "Percutaneous Automate Discectomy: A New Method For Lumbar Disc Removal Technical Note," <u>Journal of Neurosurgery</u> , 66(1): 143-146 (Jan. 1987)
	ВТ	Maroon, J. et al., "Percutaneous Automated Discectomy, A New Approach To Lumbar Surgery," Clinical Orthopaedics and Related Research, No. 238, pp. 64-70 (Jan. 1989)
	BU	Maroon, et al., "Percutaneous Discectomy for Lumbar Disc Herniation," Neurosurgery Clinics of North America, 4(1):125-134 (Jan 1993)
	BV	Mayer, et al., "Percutaneous Endoscopic Laser Discectomy (PELD): A New Surgical Technique for Non-sequestrated Lumbar Discs," Acta Neurochirurgica, Supp 54, pp. 53-58 (1992)
	CA	Mayer, "Spine Update: Percutaneous Lumbar Disc Surgery," Spine, 19(23):2719-2723, (Dec. 1994)

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Information Discle by App		Applicant Hugh R. Sharkey et al.		
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	Other D	ocuments (include Author, Title, Date, and Place of Publication)
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	СВ	Mochida, et al., "Percutaneous Nucleotomy in Lumbar Disc Herniation: A Prospective Study," <u>Spine</u> , 18(14):2063-2068 (Oct. 15, 1993)
	CC	O'Laoire, S., et al., "Spinal Cord Compression Due To Prolapse Of Cerival Intervertebral Disc (Herniation Of Nucleus Pulposus," <u>Journal of Neurosurgery</u> , 59, pp. 847-53 (1983)
	CD	Onik, G., et al., "Percutaneous Lumbar Diskectomy Using A New Aspiration Probe: Porcine And Cadaver Model," Radiology, 155(1): 251-252 (Apr. 1985)
	CE	Onik, G., et al., "Percutaneous Lumbar Diskectomy Using A New Aspiration Probe: Preliminary Results," [Journal of clinical and laboratory research,] <u>Investigative Radiology</u> , 20(6):S18 (Sept 1985)
	CF	Onik, G., et al., "Percutaneous Lumbar Diskectomy Using A New Aspiration Probe," <u>American Journal of Roentgenology</u> , 144:1137-1140 (June 1985)
	CG	Onik, G., et al., "Automated Percutaneous Diskectomy: Initial Patient Experience Work In Progress," Radiology, 162(1): 129-132 (Jan. 1987)
	СН	Onik, G., et al., "Automated Percutaneous Discectomy at the L5-S1 Level: Use of a Curved Cannula," Clinical Orthopaedics and Related Research, No. 238, pp. 71-76 (Jan. 1989)
	CI	Onik, G., et al., "Automated Percutaneous Discectomy: A Prospective Multi-Institutional Study," Neurosurgery, 26(2):228-233 (Feb. 1990)
	CJ	Patsiaouras, et al., "Percutaneous Nucleotomy: An Anatomic Study of the Risks of Root Injury," Spine, 16(1):39-42 (Jan. 1991)
	CK	Plancarte et al., "Complex Regional Pain Syndrome Type 2 (Causalgia) After Automated Laser Discetomy: A Case Report," Spine, 22(4):459-462, (Feb. 15, 1997)
	CL	Quigley, et al., "Laser Discectomy: A Review," Spine 19(1):53-56 (Jan. 1, 1993)
	СМ	Quigley, et al., "Percutaneous Laser Discectomy with the Ho:YAG Laser," <u>Lasers in Surgery and Medicine</u> , 12(6):621-624 (1992)
	CN	Revel, et al., "Automated Percutaneous Lumbar Discectomy Versus Chemonucleolysis in the Treatment of Sciatica: A Randomized Multicenter Trial," Spine, 18(1):1-7 (Jan. 1993)
	СО	Shevlin, W. et al., "Perforation of the Anterior Annulus During Lumbar Discectomy," <u>Journal of Neurosurgery</u> , Vol. 38, No. 4, pp. 514-515 (Apr. 1973)
	СР	Sluijter, et al., "Letter To The Editor," Spine, 21(4):528-529 (Feb. 15, 1996)
	cq	Smith, L. et al., "Enzyme Dissolution Of The Nucleous Pulposus," Nature, Vol. 198, pp. 1311-1312 (1963)
	CR	Smith, L. et al., "Enzyme Dissolution Of The Nucleous Pulposus In Humans," <u>JAMA</u> , 187(2):177-180 (Jan 1964)
	CS	Smith, L. et al., "Treatment of Lumbar Intervertebral Disc Lesions By Direct Injection Of Chymopapain," <u>Journal of Bone and Joint Surgery</u> , 49B(3): 502-519 (Aug 1967)
	СТ	Sussman, B., "Intervertebral Discolysis With Collagenase," <u>Journal of the National Medical</u> <u>Association</u> , 60(3): 184-187 (May 1968)
	CU	Sussman, B. et al., "Experimental Intervertebral Discolysis With Collagenase," <u>Journal of Neurosurgery</u> , 31: 628-635 (Dec. 1969)
	CV	Sussman, B., "Inadequacies and Hazards Of Chymopapain Injections As Treatment For Intevertebral Disc Disease," <u>Journal of Neurosurgery</u> , 42: 389-396 (Apr. 1975)

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	DA	Ulrich, "Automatisierte perkutane Nukleotomie," Zeitschrift für Orthopaedie und Ihre Grenzbebiete, No. 130, pp. 45-50 (Jan/Feb 1992)
	DB	van Kleef, M., et al., "Percutaneous Intradiscal Radio-Frequency Thermocoagulation In Chronic Non-Specific Low Back-Pain," The Pain Clinic, 9(3):259-268 (1996)
	DC	Williams, R., "Microlumbar Discectomy, A Conservative Surgical Approach To The Virgin Herniated Lumbar Disc," Spine, 3(2): 175-182 (June 1978)
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	DE	Yeung, A., "Considerations for Use of the KTP Laser for Disc Decompression and Ablation," Spine: State of the Art Reviews, 7(1): 67-93 (Jan 1993)
	DF	Yeung, A., "The evolution of Percutaneous Spinal Endoscopy And Discectomy: State Of The Art," The Mount Sinai Journal of Medicine, 67(4): 327-332 (Sept 2000)
	DG	Zhou, et al., "Percutaneous Lumbar Discectomy Using a New Nucleotome System: Report of 182 Cases," Chinese Medical Journal, 106(6):446-451 (June 1993)
	DH	"ArthroCare's Opening Markman Brief Regarding U.S. Patent Nos. 5,980,504 and 6,261,311," filed in U.S. District Court for the Western District of Tennessee Western Division on February 20, 2004, 31 pages
	DI	"Smith & Nephew's Opening Markman Brief for U.S. Patent Nos. 5,980,504 and 6,261,311," filed in U.S. District Court for the Western District of Tennessee Western Division on February 20, 2004, 23 pages
	DJ	"ArthroCare Corporation's Brief in Opposition to Smith & Nephew's Opening Markman Brief for U.S. Patent Nos. 5,980,504 and 6,261,311," filed in U.S. District Court for the Western District of Tennessee Western Division on March 26, 2004, 21 pages
	DK	"Smith & Nephew Inc.'s Opposition Markman Brief for U.S. Patent Nos. 5,980,504 and 6,261,311," filed in U.S. District Court for the Western District of Tennessee Western Division on March 26, 2004, 44 pages

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